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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/663,612

09/16/2003

Steven Driediger

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EXAMINER

ABRAHAM, ESAW T

ART UNIT

PAPER NUMBER

2133

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/663,612	Applicant(s) DRIEDIGER, STEVEN	
	Examiner Esaw T. Abraham	Art Unit 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-38 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to the applicant's amendments

Applicant's arguments, see Remark pages 13-27, filed 11/09/06, with respect to the rejection(s) of claim(s) 1-38 under 35 U.S.C. 103(a) as being unpatentable over Ichiriu (6,597,595) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection to claims 1-15 is made under *35 USC § 101, Non Statutory*.

Abstract

In view of the amendment filed on 11/09/06, the examiner withdraws all objections to the abstract.

Claim Rejections – 35 USC § 112(2nd)

In view of the Amendment filed 11/09/06, the examiner withdraws the previous 35 USC § 112 rejections.

Status of Claims

1. Claims 1-15 are remain pending and claims 16-38 are allowed.

Claim Rejections - 35 USC § 101, Non Statutory

2. Claims **1-15** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because:

Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. There is no limitation in any of claims 1-15 that even suggest that any hardware is required to carry out the limitations in claims 1-15 because error detection codes such as parity word can be generated using a generator matrix. Hence claims 1-15 are non-

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statutory and be carried out by hand or in a computer program. Further the claims are directed towards software per se and lacks the program steps as being stored in a medium which enables the functionality of the instructions to be executed.

Examiner's statement for reason for allowance

3. Claims **16-38** have been allowed.

The following is an examiner's statement for allowance:

As per claim 16:

The prior art of record, Ichiriu (U.S. PN: 6,597,595) in figure 25 discloses a CAM device (700) includes an error CAM (715) to assert a match error signal (732) if a match index (174) matches any of a plurality of error addresses. In addition to the error CAM, the CAM device includes an address circuit (103), comparand register (115), and error detection circuit (711). Further, the address circuit, comparand register is coupled to one another and operates generally. Furthermore, an error detection circuit (711), for example, by the parity check circuit (201) and logic gate (222) described above in reference to FIG. 6 is coupled to receive the selected CAM word and output an error signal (712) to the error CAM (715). The error detection circuit asserts the error signal upon detecting an error in the selected CAM word and deasserts the error signal if no error is detected (see col. 24, lines 10-41). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious an apparatus comprising an input error detection module adapted for generating a key-based parity word after receiving a key, wherein the key-based parity word and the key jointly define

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a comparand that is provided to a CAM module; and an output error detection module connected to the input error detection module, adapted for generating a key-based protection word after receiving the key and adapted for accessing a predetermined protection word corresponding to an address of a CAM module that contains data corresponding to the comparand in response to receiving the address from the CAM module. Consequently, claim 16 is allowed over the prior art.

Claims **17-26**, which is/are directly or indirectly dependent/s of claim 16 are also allowable over the prior art of record.

As per claim 27:

The prior art of record, Ichiriu (U.S. PN: 6,597,595) in figure 25 discloses a CAM device (700) includes an error CAM (715) to assert a match error signal (732) if a match index (174) matches any of a plurality of error addresses. In addition to the error CAM, the CAM device includes an address circuit (103), comparand register (115), and error detection circuit (711). Further, the address circuit, comparand register is coupled to one another and operates generally. Furthermore, an error detection circuit (711), for example, by the parity check circuit (201) and logic gate (222) described above in reference to FIG. 6 is coupled to receive the selected CAM word and output an error signal (712) to the error CAM (715). The error detection circuit asserts the error signal upon detecting an error in the selected CAM word and deasserts the error signal if no error is detected (see col. 24, lines 10-41). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious a memory (CAM) module, comprising means for generating a key-based parity word, wherein the key-based parity word and the key jointly define a comparand means for receiving an input error indication provided by

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the CAM module in response to failing to find the address corresponding to comparand in storage of the CAM module; means for enabling a predetermined protection word corresponding to an address of a CAM module that contains data corresponding to the comparand to be accessed in response to receiving the address from the CAM module; means for generating a key-based protection word; and means for comparing the predetermined protection word with the key-based protection word for facilitating issuance of an output error indication when the predetermined protection word is different than the key-based protection word. Consequently, claim 27 is allowed over the prior art.

As per claim 28:

The prior art of record, Ichiriu (U.S. PN: 6,597,595) in figure 25 discloses a CAM device (700) includes an error CAM (715) to assert a match error signal (732) if a match index (174) matches any of a plurality of error addresses. In addition to the error CAM, the CAM device includes an address circuit (103), comparand register (115), and error detection circuit (711). Further, the address circuit, comparand register is coupled to one another and operates generally. Furthermore, an error detection circuit (711), for example, by the parity check circuit (201) and logic gate (222) described above in reference to FIG. 6 is coupled to receive the selected CAM word and output an error signal (712) to the error CAM (715). The error detection circuit asserts the error signal upon detecting an error in the selected CAM word and deasserts the error signal if no error is detected (see col. 24, lines 10-41). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render a Memory (CAM) module, comprising a CAM module, a connection manager connected to the CAM module, wherein the connection manager includes a data processor; and a data processor program processable by the data

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processor, wherein the data processor program is adapted for enabling the data processor to facilitate, generating a key-based parity word and a key-based protection word after receiving a key, wherein the key-based parity word and the key jointly define a comparand; accessing a predetermined protection word corresponding to an address of the CAM module that contains data corresponding to the comparand in response to receiving the address from the CAM module; and comparing the predetermined protection word with the key-based protection word for facilitating issuance of an output error indication when the predetermined protection word is different than the key-based protection word. Consequently, claim 28 is allowed over the prior art.

Claims 29-38, which is/are directly or indirectly dependent/s of claim 28 are also allowable over the prior art of

Conclusion

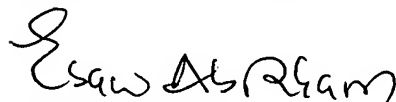
4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned (571) 273-8300.

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status

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information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Esaw Abraham

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GUY LAMARRE
PRIMARY EXAMINER